THE ACADEMY OF SCIENCE OF SOUTH AFRICA (ASSAf)
AND THE
EMBASSY OF ITALY IN SOUTH AFRICA

## ASSAf-EMBASSY LECTURE SERIES

# SOCIAL, PSYCHOLOGICAL AND HEALTH IMPACT OF CORONAVIRUS DISEASE (COVID-19) ON THE ELDERLY: SOUTH AFRICAN AND ITALIAN PERSPECTIVES

**7 JULY 2020**

science & innovation
Department:
Science and Innovation
REPUBLIC OF SOUTH AFRICA

Embassy of Italy
Pretoria

ASSAf
ACADEMY OF SCIENCE OF SOUTH AFRICA

ISBN 978-1-928496-29-8
DOI http://dx.doi.org/10.17159/assaf.2019/0064

The Academy of Science of South Africa (ASSAf) and the
Embassy of Italy in South Africa, ASSAf-Embassy Lecture Series
Social, Psychological and Health Impact of Coronavirus Disease (Covid-19) on the Elderly:
South African and Italian Perspectives

Published by: Academy of Science of South Africa (ASSAf) PO Box 72135, Lynnwood Ridge,
Pretoria, South Africa, 0040 Tel: +27 12 349 6600 • Fax: +27 86 576 9520
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The Academy of Science of South Africa (ASSAf) was inaugurated in May 1996. It was formed in response to the need for an Academy of Science consonant with the dawn of democracy in South Africa: activist in its mission of using science and scholarship for the benefit of society, with a mandate encompassing all scholarly disciplines that use an open-minded and evidence-based approach to build knowledge. ASSAf thus, adopted in its name the term 'science' in the singular as reflecting a common way of enquiring rather than an aggregation of different disciplines. Its Members are elected based on a combination of two principal criteria, academic excellence and significant contributions to society.
The Parliament of South Africa passed the Academy of Science of South Africa Act (No 67 of 2001), which came into force on 15 May 2002. This made ASSAf the only academy of science in South Africa officially recognised by government and representing the country in the international community of science academies and elsewhere.

This report reflects the proceedings of Social, Psychological and Health Impact of Coronavirus Disease (Covid-19) on the Elderly: South African and Italian Perspectives. Views expressed are those of the individuals and not necessarily those of the Academy nor a consensus view of the Academy based on an in-depth evidence-based study.

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## WELCOMING REMARKS (Prof Jonathan Jansen, President, ASSAf)

Prof Jansen extended a warm welcome to everyone on behalf of ASSAf and acknowledged His Excellency (HE) Mr Paolo Cuculi and Dr Pierguido Sarti, Science and Technology Attaché at the Embassy of Italy in South Africa, the four panellists and the moderator, Prof Priscilla Reddy.

Prof Jansen expressed appreciation for the focus of this engagement as it provided a broader canvas for the discussion on COVID-19. In his capacity as a specialist in the field of Education, Prof Jansen had recently completed a book about the stories of 620 students from primary and high schools around the country. The most troubling accounts in these stories were about the incredible mental and psychological distress of children were experiencing in current times. The epidemiological data did not take account of the non-biomedical concerns that should also be highlighted in the broader public health environment. Prof Jansen also contributed a set of papers to the South African Journal of Science (SAJS) by people from completely different disciplines including Law, Anthropology and Psychology, to provide another perspective on COVID-19.

The ASSAf-Embassy Lecture Series is one of the wonderful innovations of the Academy particularly because the work of science could not be limited by national borders, as the world has learnt from the COVID-19 pandemic. The partnership between South Africa and Italy was of particular importance in the context of the pandemic. The spread of COVID-19 among Italy's most vulnerable communities was a heart-wrenching experience. As South Africa appears to be headed in the same direction as Italy, it can learn much from how the Italians managed the pandemic and in turn, can share some ideas with Italian colleagues. The decision by the Italian Embassy and ASSAf to host a webinar on this topic was not only timely but had the potential to be life-saving if the discussions move to the broader public sphere where they could make a major difference to the current existential crisis in South Africa, specifically in terms of the elderly population of this country.

Prof Jansen thanked the Italian and South African leaders, researchers, colleagues and friends for being part of the webinar and wished them productive discussions.

## WELCOMING REMARKS (HE Mr Paolo Cuculi, Ambassador, Embassy of Italy in South Africa)

Ambassador Cuculi greeted the distinguished colleagues and friends from Italy, South Africa and beyond, and expressed pleasure in partnering with ASSAf to host this timely webinar, which underlined the global nature of the threat the pandemic held. Italy was slowly heading towards recovery after COVID-19 struck the country with unexpected ferocity earlier this year, leaving more than 35000 of its citizens dead in its wake. Worldwide partnerships were an essential element of the global response to this deadly virus.

The focus of this webinar was extremely relevant given that the bulk of COVID-19 victims in Italy were those beyond 70 years of age - a particularly vulnerable category of the country's population. The objective of the initiative was to compare experiences, learn from shortcomings or errors, and try to put together best practices and come up with constructive ideas on how to be most effective in this fight. In Italy, the pandemic was currently in its fifth consecutive month. One of the most important elements was the psychological and emotional stress that the pandemic placed on people, both during the

peak of the disease and after it had passed. There was a clear and understandable tendency for ordinary people to become disconcerted about the ongoing sanitary and health recommendations and best practices.

A common trend in the modern and contemporary world was the spreading of news via social media. The Embassy of Italy supports the need to take a firm stand for science and put evidence-based decision making at the centre of policy processes.

Ambassador Cuculi acknowledged the presence of the Director of the Italian National Institute for Infectious Diseases, Prof Emanuele Nicastri, and the Scientific Director of the National Institute for Health and Science on Ageing, Prof Fabrizia Lattanzio. He thanked the Healthcare and Research Division of the Italian Ministry of Health for contributing to the organisation of this event, and highlighted the importance of the health sector as a whole in the scientific cooperation between Italy and South Africa, which formed a priority of the institutional activities of the Embassy of Italy in South Africa under the leadership of Dr Pierguido Sarti.

Italy's National Institute of Health had submitted a proposal to the South African Department of Science and Innovation (DSI) concerning cooperation in areas including transmittable diseases and food safety. Within the framework of an initiative of the Italian Ministry of Health together with an international consortium of approximately forty funding bodies from European Union (EU) member states, a South African researcher was awarded a prize for best practice in personalised medicine who, along with a team from the University of Stellenbosch, worked on the development of a testing platform for application in breast cancer.

The Embassy of Italy looked forward to extending this fruitful bilateral cooperation in the field of health with its South African friends and partners and anticipated that this webinar would lead the way for enhanced collaboration on a common response to COVID-19. The Department of Health in South Africa had been approached in order to organise virtual hospital to hospital workshops that could involve teams of healthcare workers in both Italy and South Africa, and offer a further opportunity to exchange experiences, best practices and lessons learnt.

**PANEL DISCUSSION (Moderator: Prof Priscilla Reddy, Strategic Lead, Health and Wellbeing, Human and Social Capabilities Division, Human Sciences Research Council (HSRC), South Africa)**

**SARS-CoV-2 Infection, Physical Distancing and World Health Organisation (WHO) Criteria for Isolation Release (Prof Emanuele Nicastri, Director, Lazzaro Spallanzani National Institute for Infectious Diseases, Italy*DFGHJ)**

The Lazzaro Spallanzani Institute in Rome admitted the first two COVID-19 patients from China in January 2020. The epidemiologic curve of COVID-19 in Italy showed that the virus peaked during March and April this year when there were more than 6000 cases per day and the case fatality ratio was 33.1% among patients older than 80 years. Classifications of patients according to gender showed a pronounced case fatality among males. It was important to note that more than 80% of all patients remained at home and of the 20% who were admitted to hospital, 5% were admitted to the Intensive Care Unity (ICU). A far higher

incidence of COVID-19 occurred in the northern parts of Italy than in the rest of the country. The impact on healthcare workers was largely underestimated and possibly more than double the figures provided in the data, which shows that more than 29000 healthcare workers were affected and 87 (0.3%) died.

Lockdown, hand washing and physical distancing measures aimed to slow the spread of the virus seem to have shortened the influenza season in the northern hemisphere by about six weeks. The use of face masks proved to be more effective in preventing person to person transmission than any drugs, and physical distancing of 1 meter reduced the risk by 82% both in healthcare settings as well as in communities. Every additional meter of distance between people more than doubled the relative protection.

It was important to apply the WHO criteria for discharging confirmed COVID-19 patients from isolation without requiring retesting, as follows:

- Symptomatic patients could be discharged 10 days after the onset of symptoms, plus at least 3 additional days without symptoms (including fever and respiratory symptoms)
- Asymptomatic cases could be discharged 10 days after testing positive for SARS-CoV-2.

This strategy was based on clinical symptoms and not Polymerase Chain Reaction (PCR) testing.

**Impact of COVID-19 on the Elderly (Prof Fabrizia Lattanzio, Scientific Director, National Institute for Health and Science on Ageing, Italy)**

A comparison of COVID-19 cases, trends and demographic distribution of the population between South Africa and Italy indicated that the impact of the COVID-19 infection on the older population of both countries was much the same. Data from the Italian National Institute for Health and Science on Ageing shows that apart from the mortality rate in the over 60 population, people who died from COVID-19 had a number of comorbidities, which meant a high degree of complexity.

Nursing homes and residential care homes in Italy had high mortality rates. The elderly living in residential care were characterised by frailty, multimorbidity and dementia, making the risk of exposure to the virus very difficult to manage. Dementia was found to be the second most prevalent comorbidity among a cohort of elderly people admitted to a geriatric hospital in Italy. Although the focus was usually on mental health problems in older people, their functional status should also be taken into account. Data showed that three days before the occurance of COVID-19 related symtoms, elderly people experienced a decline in basic activities of daily living, yet frailty continued to be neglected in the strategy to manage COVID-19 in older people. Research publications had a tendency to describe the infection, but failed to help understand the role of frailty in treatment outcomes and post-acute management.

Preliminary evidence suggested that older people with complex needs and living in communities, as well as their carers had a high level of stress and anxiety relating to their health status and risk of mortality. Increased numbers of informal carers were in need of information, guidance and support, and social isolation and worsening mental health was experienced by those with lower digital skills.

In a study undertaken in a geriatric hospital in Italy, psychologists and educators developed

psycho-social interventions that targeted patients with neuro-degenerative diseases and their caregivers. They were provided psychological and physical support using different media and approaches. It was found that in order for these interventions to be successful, a close relationship between patients, their families and caregivers was essential.

In terms of lessons learnt, preliminary evidence suggested that the elderly population was hit heavily by both the pandemic as well as the measures undertaken to contain it, that there needed to be a focus on prevention, and that health education and literacy needed to be promoted in order to ensure better resilience and the wellbeing of older people. Despite social and cultural differences, a close relationship between formal and informal carers, healthcare providers and older people was vital for an effective strategy. To date, there had not been a comprehensive, cross-national effort to measure the impacts on the elderly and the multifaceted implications of these impacts for society as a whole. Geriatric outcomes along with specific psycho-social needs should be taken into account when developing primary, acute and long-term care policies for clinical management, prevention and containment.

**Social, Psychological and Health Impact of COVID-19 on Elderly Persons (Prof Ashraf Kagee, Co-Director, Alan J Flisher Centre for Public Mental Health, University of Stellenbosch, South Africa)**

Elderly persons play an important role in maintaining the social fabric as caregivers, volunteers, community leaders and traditional healers. They are often primary caregivers of grandchildren whose parents may be working or have migrated to other parts of the country, and, as recipients of an Older Person's Grant (OPG) from the state, which in some cases may be the only source of income in their families.

Factors that might affect older persons in the context of the COVID-19 pandemic included:

- Structural factors:
  - Older persons in quarantine or lockdown with family members or caregivers may face risks of violence, abuse and neglect.
  - Older persons living in precarious conditions such as informal settlements may be at risk of infection due to overcrowded conditions and limited access to health services, water and sanitation facilities.
  - Older persons, especially women, may be the caregivers of others, which may increase their risk of exposure to COVID-19 where health systems and care provision were weak.
  - A lack of access to health information from credible internet sources under low resource conditions.
- Psychological factors:
  - Anxiety about becoming infected, becoming ill, needing hospitalisation, being on a ventilator or dying.
  - Social distancing guidelines required elderly persons to not be visited by family members, care homes were out of bounds and funerals had to have minimal attendance.
  - Loneliness, grief and bereavement could be acute among elderly persons when many of their peers become ill and die.
  - The impact of the above factors was accentuated in older persons who had cognitive decline or dementia.

Risks associated with the OPG concerning the mode of transport used by recipients to collect their grants and the inevitable standing in queues, which placed older persons at risk of infection. These risks lead to elevated anxiety. Additional factors for consideration include the likelihood that more household members could become dependent on the OPG due to job losses and this could lead to tensions within the household and place the older person at greater risk of infection.

The United Nations (UN) Policy Brief on Older Persons was helpful in thinking through some of the policy issues. It emphasised that difficult healthcare decisions affecting older people should be guided by a commitment to dignity and the right to health, and that the particular risks faced by older persons in accessing healthcare including age discrimination, neglect, maltreatment and violence in residential institutions needed to be properly monitored and fully addressed. Social inclusion and solidarity needed to be strengthened during physical distancing, which could lead to a disruption of essential care and support for older persons. Physical distancing was crucial but needed to be accompanied by social support measures and targeted care for older persons including access to digital technologies. A focus on older persons needed to be integrated into the socio-economic and humanitarian response to COVID-19. It was necessary to respond to the UN's call for financial support for developing countries and those in humanitarian crises, where the human and economic impact of the pandemic could be devastating. The structural causes that left older persons behind and vulnerable in this crisis needed to be addressed if care, support and opportunity were to be ensured across the lifecycle. There needed to be investment in universal healthcare coverage and social protection, and the legal framework required strengthening to protect the human rights of older persons. The final policy consideration was to address ageism and age discrimination. Public policies needed to include older persons in public data analysis and the data must be disaggregated by age, gender and the relevant socio-economic variables so that effective public policy can be developed for the older population groups.

Some of the ongoing challenges experienced by older persons related to:

- The increasing need for access to data to facilitate health behaviour information, telepsychology, cell phone apps that supported older persons psychologically
- The need for guidance on managing social media and technology
- Maintaining emotional wellbeing and managing news overload
- Developing ways to manage loneliness, isolation, grief and bereavement.

**COVID-19 and Long-Term Care for Elderly People in South Africa (Prof Marguerite Schneider, Deputy Director, Alan J Flisher Centre for Public Health, University of Cape Town, South Africa)**

The presentation highlighted findings of a research project that looked at strengthening dementia responses in developing countries – the STRiDE project.

The majority of long-term care (LTC) happened in the home and was usually carried out by a female, untrained, and unpaid workforce. LTC facilities were located mostly in urban areas and both public (subsidised by government) and private (expensive and only accessible by a few). Private facilities tended to incorporate specialised frail and dementia care. Experiences of home-based care in terms of the COVID-19 pandemic were largely

undocumented, but isolation, loss of support groups and emotional factors played an important role in the physical and emotional impact of the pandemic.

A collation was done using public media information around LTC facilities' responses to COVID-19 and responses to questionnaires about experiences of 30 facilities spread across most provinces in South Africa, primarily in the private and non-government organisation (NGO) sector. Some key experiences around prevention were the late and sometimes inappropriate provision of guidance documents, delayed and inadequate personal protective equipment (PPE) provided by the state and delays in obtaining test results. Given the relatively late start of the lockdown in South Africa, facilities took lessons from what had happened across the world, including Italy, and were proactive in developing their own policies and procedures towards preventing the spread of COVID-19. Isolation and change of routine had a significant effect on everyone and caused stress and emotional reactions from staff and residents. The need for careful documentation of all processes brought with it additional administrative burdens and stress. Several human resource (HR) factors came to the fore such as the absence of accredited training and registration of carers, the fear and stigma of staff being infected and requests by staff for 'danger pay' and incentives to work during the pandemic. The delay in the rise of infections meant that people were already tired and strained at the peak of the pandemic. The financial impact of COVID-19 was evident in the increased expenses and reduced income of LTC facilities.

The policy implications of LTC facilities' experiences with regard to the COVID-19 pandemic related to:

- Representation of the LTC sector on COVID-19 coordination and advisory bodies
- Ensuring that policies addressed the LTC sector directly
- Coordination of efforts between government department of health and social development
- Formal recognition ('professionalising') the caregiver sector and the establishment of a caregiver register and accredited training.

It was important to recognise the innovation that came out of having to be flexible and adaptable in an unprecedented crisis, to hear the voices of LTC facilities and home-based carers, and to balance infection control and emotional wellbeing. Consideration should be given to providing stress management and emotional support for staff, residents and home-based carers, communicating relevant messages with an emphasis on recovery and prevention (not only illness and death), and managing the changes as the pandemic progressed as well as staff burnout.

**Questions and Answers**

**Question:** What proportion of the older population in South Africa is older than 60 years and what proportion of the COVID deaths are over the age of 60?

**Response, Prof Schneider:** About 8% of the population in South Africa is 60 years and older. There is no surveillance of the LTC sector in this country, but we know that most older persons who need care are cared for at home by their families. About 84% of the population rely on state services. The sector is therefore overburdened and there is very little availability of LTC facilities for the poorer population. There is very little monitoring of deaths in the care homes. The Department of Social Development has begun to request more

formal statistics from the care homes and this might yield some information about COVID-19 deaths. Analysing the excess deaths during this period will also allow us to do an age breakdown. The National Institute for Communicable Diseases (NICD) is hopefully working on this.

**Question:** The epidemiological data presented by Prof Nicastri was really grim. He indicated that there are no biomedical solutions at this moment and that masks were a very important behavioural device that needs to be promoted. In the intergenerational households in South Africa and other low to middle income countries there are difficulties with social distancing, but people can wear masks. What is the panel's view on how to encourage the use of masks, particularly in the context where there might be lockdown fatigue in carrying out behavioural, preventative methods?

**Response, Prof Nicastri:** Prevention is always the most important treatment and medical advice. There are many cases that have demonstrated that masks work much better than antiviral drugs, and could work better than a flu vaccination. Masks are a very easy to use, friendly and cheap infection control measure that can be applied everywhere and by everyone. We only need the culture, knowledge and competence to motivate their use. Masks, together with physical distance and hand hygiene are the basic prevention measures, specifically in care homes and hospital settings.

**Response, Prof Kagee:** A particular theoretical model speaks about the importance of capability, motivation and opportunity for people to engage in specific health behaviours. People must have the capability to wear a mask, the motivation to wear a mask and opportunities to wear a mask. One issue that occurs to me is the influencing of social norms through creating capability, motivation and opportunity. It has now become a civic duty for people to wear masks, not only to protect themselves, but also to protect other people in the event that one has the virus.

**Response, Prof Schneider:** People with dementia tend not to understand why they should wear a mask and try to remove masks worn by their caregivers because they want to see their faces.

**Question:** What about access to Information and Communications Technologies (ICTs) and the use of the internet to mitigate the effects of social isolation, lockdown fatigue and so forth?

**Response, Prof Kagee**: This is a very important issue. There are structural factors associated with data access. People do not have cheap available data or cheap available devices to access the internet. Older persons are often less adept when it comes to using technology. We also need to accept that not everything on the internet is useful. Some things are bad. Everybody needs guidance on credible sources of information and support on the internet.

**Response, Prof Schneider:** LTC facilities make a huge effort to ensure that families have contact with their loved ones in the facilities through a variety of technologies. People with dementia are limited in this area and react quite badly to using ICTs to communicate.

**Response, Prof Lattanzio:** We studied patients with neuro-degenerative disease and their caregivers using different ICT tools to mitigate the effect of social isolation during lockdown.

I think that we have to also consider the use of ICT instruments as a strategy to reduce the restriction of access to health services, to manage the comorbidities and to keep in contact with older people. The clinical aspects of their health status need to continue to be taken care of. In order to address these issues, we need to implement strategies to increase the digital skills of the elderly population and their families.

**Questions:**

- Given the fact that older persons presented with other chronic diseases, was COVID-19 the most evident and the main cause of death?
- Could the fact that women seem to have a higher incidence be attributed to the fact that they tend to be primary caregivers?

**Response, Prof Nicastri:** Most elderly patients died not from the coronavirus but with the coronavirus (attributable mortality). This is the key for a lot of infections in the elderly and is nothing different from what we experience with our patients every day. Obviously, patients with more comorbidities and are in LTC facilities have an increased risk. The data, from an epidemiological point of view serves as an observation of the need to give more attention to the categories of the population that are frail.

**Response, Prof Lattanzio:** From the geriatric point of view, we are trying to introduce a new concept of multimorbidity using a patient-centred approach. We have to consider that all the diseases that affect a patient could correlate with each other, with COVID-19 being just one of several diseases. We need to pay attention to this kind of epidemiological dimension and manage patients accordingly.

**Question:** Are LTC facilities potential hotspots for contracting COVID-19 infection?

**Response, Prof Lattanzio:** Yes, they are. We have to consider the lifestyle within the LTC facilities. Old people live in community and require caregivers to help them with their daily activities. We also had this problem in Italy, at the hospital and nursing home level.

**Question:** Do hospitals also serve as such hotspots?

**Response, Prof Reddy:** The data in South Africa at this stage is not yet comprehensive and it is therefore difficult to give a long-term picture of the situation. More will be learnt as we move forward. For now, the main message is to use PPE and take preventative measures all the time.

**Concluding Remarks**

Prof Nicastri concluded that the COVID-19 outbreak should be used as a model to build a new system to work with further outbreaks and pandemics all over the world. A model was needed that worked from an epidemiological, prevention, treatment and response point of view. It was necessary to work with different countries to develop such a model. Multilateral and bilateral approaches could be very useful even in countries that have different cultures and approaches to the outbreak. This webinar could help to take this matter forward.

Prof Lattanzio emphasised the importance of focussing attention not only on the clinical characteristics of COVID-19 infection, but also on using a comprehensive approach that took different settings into account. It was necessary to collect data in a comprehensive

way and make a global effort to map the impact of COVID-19 on vulnerable groups of the population, considering the implications for society as a whole. From the geriatric point of view, it was important to consider multimorbidity instead of individual comorbidities and focus attention on geriatric outcomes in order to manage the care of elderly patients.

Prof Kagee made the following points:

- The emotional wellbeing of elderly persons had been neglected and required urgent attention. It was important to find ways to provide social, psychological and emotional support to the elderly.
- Ageism and age discrimination needed to be addressed and could not be allowed to influence the way in which services and care were provided to the elderly.
- Very few people were working with and thinking about issues that pertained to the elderly population. This webinar was a starting point for what had the potential to be a very important and rich discussion to develop policy guidelines that would feed into government at the provincial level and be implemented.

Prof Schneider highlighted the need to harness the lessons learnt so far and build a resilient way of managing the pandemic. In doing this, it was necessary to ensure that support networks were built and to listen to all the voices around LTC issues in South Africa. It was also important to balance the risks and find a way to maximise prevention as well as wellbeing.

Prof Reddy thanked the panellists and participants and anticipated that this discussion would lead to some tangible work.

**CLOSING REMARKS (Dr Pierguido Sarti, Science and Technology Attaché, Embassy of Italy in South Africa)**

Dr Sarti thanked Prof Reddy for moderating the discussions, the ASSAf colleagues, particularly the President and the Executive Officer for making the webinar possible, and the panellists for making themselves available to present at the webinar and for raising extremely interesting points. He was grateful for the opportunity to work with Dr Bulani from the Academy in organising this event as part of the ASSAf-Embassy Lecture Series.

The points highlighted by the panellists in their wrap-up comments, in particular the importance of bilateral cooperation and the desire for further collaboration around specific policies for issues pertaining to the elderly, would be pursued. Dr Sarti assured ASSAf of the Embassy of Italy's interest in supporting this kind of cooperation. He was concerned about what he had observed in Italy and to some extent in South Africa, although the two countries were going through different phases of the pandemic and had different issues to deal with. The common disease that spread with ease has to do with fake news and the tendency to not report accurately on the seriousness and importance of the COVID-19 outbreak. Much work needed to be done to spread knowledge based on scientific facts and this could be done by sharing experiences from both of countries.

Dr Bulani concluded the webinar by thanking the Embassy of Italy for the fruitful working relationship with ASSAf. He encouraged other embassies in South Africa to work with ASSAf on topics of mutual interest as part of the ASSAf-Embassy Lecture Series. He also thanked Prof Reddy, the panellists and the participants, and his ASSAf colleagues.

## LIST OF ACRONYMS

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| ASSAf | Academy of Science of South Africa |
| COVID-19 | Coronavirus Disease |
| HE | His Excellency |
| ICT | Information and Communications Technology |
| LTC | Long-term care |
| NICD | National Institute of Communicable Diseases |
| NGO | Non-Government Organisation |
| OPG | Older Person's Grant |
| PPE | Personal Protective Equipment |
| UN | United Nations |
| WHO | World Health Organisation |

2020

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